

CENTRAL INTELLIGENCE AGENCY

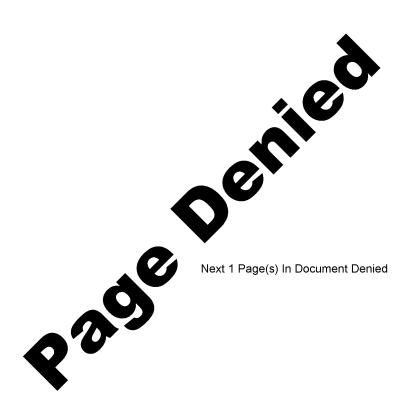
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COUNTRY	Poland	REPORT		
SUBJECT	WSK Factories in Warsaw	DATE DISTR.	8 JUN 1959	
	(Transportation Equipment)	NO. PAGES	1	
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	SOURCE EVALUATIONS ARE DEFINITIVE. APPR	AISAL OF CONTEN	I IS TENTATIVE	
	wsk (Transportation Equipment Factory)e of Warsaw and one in the Czerniakow dis locations and site layouts of the plant history, labor force, operations, items	stâblishments, c trict. The re s as well as in	port gives pinpoint nformation on the	rict
				50X1-HUM

ARMY review completed.



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TRANSPORTATION EQUIPMENT FACTORIES IN WARSAW, POLAND (C)

Introduction	50X1-HUM

Listed below are the names with geographic and UTM coordinates of locations mentioned throughout this report. Coordinates for well-known locations are not shown.

	Location	Geographic Coordinates	UTM Coordinates
	ANDRYCHOW	N49-51, E19-21	CA-8124
	LABEDY (LABAND)	N50-20, E18-37	CA-3079
	POREBA	N50-29, E19-21	CA-8394
1.	PRUSZKOW SADEK SZYDLOWIEC Transportation Equipment	N52-10, E20-50 N51-12, E20-53 N51-13, E20-52 t Factory in the Wola Di	DC-8880 DB-915725 DB-9075 strict of WARSAW

a. Location

The Transportation Equipment Factory (Wytwornia Sprzetu Komunikacyjnego-WSK) was located in the Wola district of WARSAW. See Annex A for location of the 50X1-HUM factory and Annex B for the site layout of the factory.

There was a cemetery east of the plant.

b. History

The WSK factory was built after WW II. it began 50X1-HUM operations in 1952, and from 1952 through 1958 produced engines for army tanks and for industry.

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	The plant was referred to as "WKS Wola"; sometimes it was	as just called 50X1-HUM
Wola."	the official designation of the factory was	3 "WAL HE 19"
		this
factory was	the only tank-engine producing factory in Poland.	
c. (Organization	
	Operation Equipment Factory came directly under the Central Adv	onally, the 50X1-HUM
CZPMB), which	truction Machine Industry (Centralny Zarzad Przemyslu M h came under the Ministry of Heavy Industry (Ministerst The Special Industries Construction Projects Bureau (B Przemyslu Specjalnego) was responsible for construction he plant.	wo Przemyslu iuro Projektow
	OSIECKI (fnu)	was chief of the 50X1-HUM
foundry (Kie	rownik Odlewni) at the plant.	00/(1110IM
d.	Operations and Production	
1952 to 1956 tanks. From The 6-cylind dla wytwarza	(1) This factory produced 12-cylinder engines for T-34; from 1957 through 1958, it produced 12-cylinder engines 1952 to 1958 it was also producing 6-cylinder engines her engines were used as diesel generator units (do napenia pradu elektrycznego) in agriculture and forestry, a they were used by fishing trawlers (dla kutrow ryback the foundry produced some civilian goods, such iron shoe repair leg stands; some type manufactured in the factory in 1958.	es for T-54 for industry. dzania pradnicy 50X1-HUM nd ich/.
capacity was	(2) When the factory began operations in 1952, the pla 3000 tank engines per year. 5 plant produced 300 tank engines and 200 engines for in the factory in 1958 was capable of fulfilling its	dustry per year. 50X1-HUM original planned
capacity bec	ause of an expanded labor force and general development the plant was producing only ab	of factory opera- out 1000 engines
per year, in	acluding tank engines and engines for industry, and in a	ddition to some
civilian pro		
		50X1-HUM
		he capacity of
electrically	d aluminum foundries was to be increased through the insp-operated ground conveyor-cart system in place of the manufacture.	anually-operated ments were planned.

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	figure was also the ned about the same ed above took place, production of about	50X1-HUM
the iron foundry; 3 furnaces had an inner diameter of approxim had an inner diameter of 300 mm. The 300-mm furnace was used	for making piston gs were used for the	
the planned capacity for the aluminum	foundry in 1952 was	50X1-HUM
2000 tons; this foundry was to begin using metal molds in place of sand mould have increased the capacity for production.	olds; this procedure	
(8) the aluminum for 8 gas-operated crucible furnaces (piece tyglowe gazowe) of about 2 Soviet-manufactured electric refractory furnaces (piece open capacity each; for bronze, 1 Soviet-manufactured horizontal, sarc furnace (piec lukowy, jedno fazowy, poziomy), type "DM" (mabout one-half ton capacity.	100 kg capacity eac cowe) of about 1-ton single-phase electric	
(9) Types of sand used at the foundry were clay (piasek kwarcowy), and sand treated with flax oil which was midextrose (piasek olej lniany oraz troche dekstryny).	(gliny), quartz sand xed with a little	
(10) one of the reasons for Wola plant was to make casts for other factories.	the iron foundry at	50X1-HUM
the Wola plant, beginning in 1959, was to prepare casts for the Works (Zaklady Mechaniczne URSUS) in WARSAW, which produced travere to be engine blocks (korpusy dla silnikow) for tractor expreduce 1500 tons of finished products per year for the URSUS	actors. The casts ngines; Wola was to plant.	
duce 2000 or 3000 tons of finished products per year for a fawhich manufactured high compression engines (silniki wysokoprand for forestry.	accord in winitions	
(11) The iron foundry used about 40 percent pig cent scrap iron in its products.	iron and about 60 per n came from Silesia.	: 50X1-HUM
Aluminum used in the foundry came from an a WROCLAW, name and location unknown.	luminum refinery in	
(12) Costs of raw materials were unknown.		
(13) Most machines used in the factory were of S some machinery was of Polish make; and a very small number of German and Czech manufacture. The Czech machines were used f Machinery appeared to be new: the factor with new machinery.	machines were of	50X1-HUM

CONFIDENTIAL -5-50X1-HUM the (14) Source of electric power was unknown. factory had its own water wells. the quality of engines was good. (15)too much aluminum was used in engine manufacture; however about 90 percent of the engines was of aluminum; beginning in 1956 more iron was used in engine manufacture; for example, cylinder blocks (bloky cylindrowe), formerly made from aluminum, were made from iron. 50X1-HUM all tank engines completely assembled were (16) engines were shipped by train shipped to LABEDY. e. Labor (1) Number in 1958 there were about 2000 workers at this 50X1-HUM factory. Since initial operations, the working strength had gradually increased, continue to increase to unknown numbers because of the proposed expansion mentioned earlier in this report. One reason for an increased labor force was to provide jobs for the people of WARSAW. the work force capacity of the factory was about 3000. Workers came from the WAKSAW area. About 20 percent of the labor force were women. (2) Work Shifts sure, that there were two work shifts.50X1-HUM one shift operated from 0600 to 1400 hours and another from 1400 to the shifts operated 2200 hours, Monday through Friday. On Saturdays from 0600 to 1200 hours, and from 1200 to 1800 hours; there was no work on Sunday. The first shift was believed to have had more workers than the second shift. f. Security (1) Barrier The plant was enclosed by a $2\frac{1}{2}$ to 3-meter-high wire fence, with the exception of one 50-meter sector on the east side, where there was a brick wall. (2) Guards the factory was secured by industrial guards 50X1-HUM (straz przemyslowa): one guard at the main gate (Nr 2 and Nr 22 on Annex B), two guards at point Nr 5 (Annex B), and one guard at the inner gate (Nr 22). 50X1-HUM (3) Other Measures

The precedure for admittance to the production area was as follows (see Annex B): A visiter came to the Pass Bureau (Nr 1); the Pass Bureau telephened the section to which he desired to go; that section questioned or confirmed authority to visit; if the visiter received his pass, he proceeded to the Directorate (Nr 4), where his pass was endersed; he then proceeded through gate (Nr 5) to the section.

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The engine assembly shop, point Nr 7 in Annex place to visit	SOX1-HUM
2. Transporation Equipment Factory in the Czerniakow Dista. a. Location	trict of WARSAW
This Transportation Equipment Factory was located Czerniakow district of WARSAW. it appears that the factory was in the Sield city, but the area where the plant was Czerniakow even though after WW II people began to call it Sield Annex A for location of the factory: see Annex C for its site	ce district of the located was called slce as well. See 50X1 HUM
lay open fields to the Wisla (Vistula) River, except for the which is still part of WARSAW.	ne east of the factory section Siekierki,
b. History	
This factory was built about 1949; at that time is school supplies (fabrika przyborow szkolnych). In 1951, the Eupplies moved out, and operations were begun to convert the production of fuel injection pumps (pompy wtryskowe dla silnifor high-compression engines; building Nr 3 (Annex C) was builtheavy machinery. Production of the fuel injection pumps was 1958, the plant was still producing the same item, and continue the same production because of the specialized nature	Factory for School establishment to the kow wysokopreznych) It to accommodate begun in 1952. In 50X1-HUM
This factory was referred to as "WSK Czerniakow"; simply called "Czerniakowska." Its official designation was number	
	50X1-HUM
c. Organization	
factory came under the same control as the WSK plant at Wola	perationally, this (see paragraph 1 c). 50X1-HUM
d. Operations and Production (1) This plant produced fuel injection pumps for 6-cylinder diesel engines, which were manufactured at the WSK graph 1). there were two types of fuel injection which could have been used for gasoline engines as well.	plant in Wola (para-
(2)	50X1-HUM
(3) the plant received steel cast iron from the WSK plant at Wola (paragraph 1). Costs of unknown.	

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(4)			
(5)		nery was of Polish man	50X1-HUM
TR-90. manufactu	mainder was of Soviet and Czechoslovak manufacthe following Polish manufactured lathes (tolured at Fabryka Poreba in POREBA; and TUS, manufactured machine drills (wiertarki).	carki): TK-45 and TR nufactured in PRUSZKO	N.
(6)	Source of electric power was unknown ed from the city water system.		
(7)	the fuel injection pumps v	were of good quality.	50X1-HUM
was planned to h 1953, there were the future, was workers were wom	Number the working force capacity of the 400 workers about 150 workers. The working strength, in	in the period 1952 to	
	there were two 8-hour shifts	s, Monday through	
	6-hour shifts on Saturday. There was no work shift had more workers than the second shift		50X1-HUM
f. Secu	rity		
(1)	Barrier	50X1-	HUM
	The plant was enclosed by a 2-meter-high ire	on-bar fence.	
(2) located at its e They were believ	the only guards who see industrial guards were to be unarmed.		
(3)	Other Measures		
Directorate in t	The procedure for admittance to the plant witter came to the Pass Bureau (Nr 1); this but the production building (Nr 2), and the Directive visitor than proceeded into the plant.	reau telephoned the	ty 50X1-HUM

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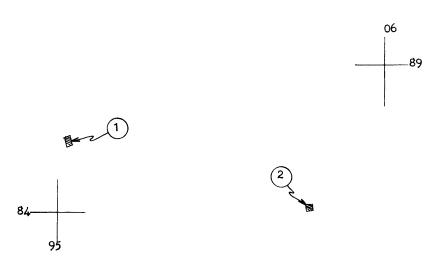
Annex A

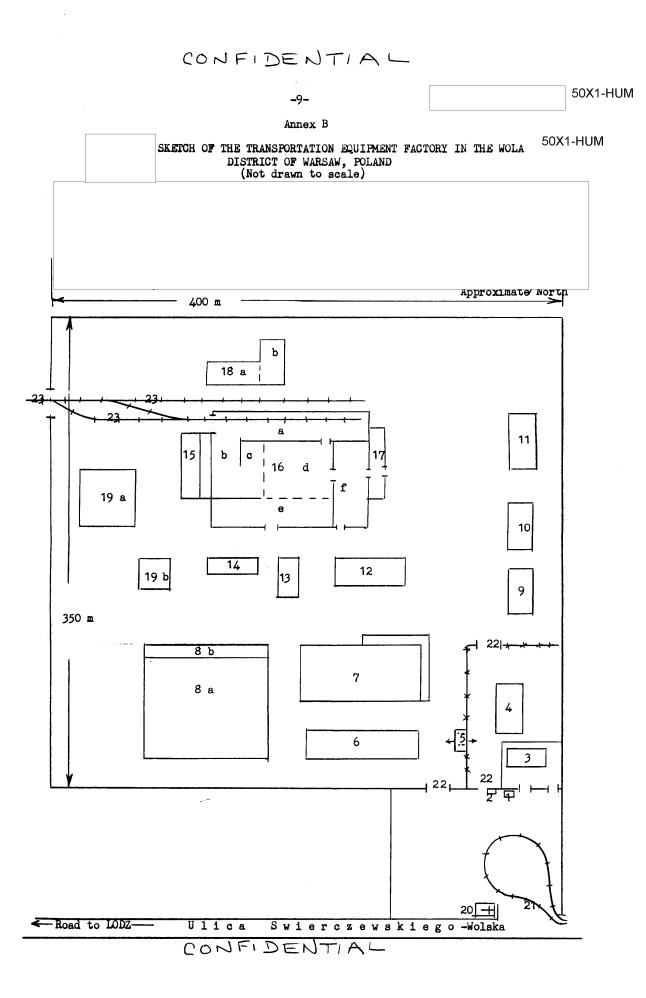
PINFOINT LOCATIONS OF TRANSPORTATION EQUIPMENT FACTORIES IN THE WOLA AND CZERNIAKOW DISTRICTS OF POLAND

	50X1-HUM

Legend:

- Transportation Equipment Factory at Wola
 Transporation Equipment Factory at Czerniakow





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Legend to Annex B

Note: Buildings were a minimum of 20 m apart; exact distances were not known. The prefabricated concrete was believed to be reinforced. Prefabricated concrete blocks, used as supports, were about 6 to 8 m in height (length) and had a cross section about 60 cm square.

- Bureau which issued passes and entry permits for the plant. Building was of wood and measured 4 x 2 m.
- 2. Guardpost; structure was frame with a roof and measured 2 x 1 m. The guard controlled this main entrance for personnel and vehicles by checking workers' passes and by operating the chain barrier across the driveway.
- 3. Factory-operated store which sold various items, including food, clothes, and radios; any individual could purchase from this store. It operated Monday through Saturday. The building was brick and plaster, 15 x 7 x 5 m, 1 floor, white.
- 4. Directorate. The building was brick and plaster, 30 x 14 x 8 m, 2 floors, white.
- 5. Entrance to production area; guards checked passes at this point also. The building was wood and plaster, $10 \times 3 \times 3\frac{1}{2}$ m, 1 floor.
- 6. Machine tool shop. Brick and concrete construction, 50 x 18 x 6 m.
- 7. Engine assembly shop and warehouse for finished products (engines).

 the engines were completely assembled. The building was brick and concrete, with most of the framework of prefabricated concrete blocks; it was red and gray, measured 70 x 36 x 10 m, and had a ramp on the eastern end.
- 8a. Mechanical section where machine parts for engines were made. The building was brick and concrete, 50 x 50 x 8 m, 1 floor, red and gray.
- 8b. Administrative offices and locker rooms; 50 x 9 x 8 m, 2 floors.
- 9. Warehouse, brick, 15 x 8 x 5 m, 1 floor.
- 10. Main offices for the mechanical and electrical sections. Brick and plaster, 20 x 8 x 8 m, 2 floors, white.
- 11. Finance section, brick, 25 x 8 x 8 m, 2 floors, red.
- 12. Electric transformer station; brick, 30 x 10 x 7 m, red.
- 13. Warehouse for storage of metals; constructed from large concrete bricks; 15 x 6 x 5 m; 1 floor; gray.
- 14. Warehouse for aluminum; constructed from large concrete bricks; $20 \times 6 \times 5 \text{ m}$; 1 floor; gray.
- 15. Warehouse for pig iron and scrap iron; constructed from prefabricated concrete blocks and bricks; 20 x 6 x 5 m; red and gray. A roof connected building Nr 15 with building Nr 16.

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Legend to Annex B (Continued)

- 16. Foundry; framework was prefabricated concrete blocks; other construction was brick; 85 x 85 x 15 m; 1 floor; red and gray.
- 16a. Sand storage area; quartz sand, clay or loam (piasek kwarcowy i glinka).
- 16b. Smelting and cleaning section for cast iron (wytopialnia i oczyszczalnia dla zeliwa). This area had 3 smelting furnaces (zeliwiaky) with inner diameter of 900 to 1000 mm.
- 16c. Moulding of cast iron products (formiernia zeliwa).
- 16d. Moulding of aluminum castings (formiernia odlewow aluminum).
- 16e. Smelting of aluminum and chilled casting of aluminum alloys (topialmia aluminum i kokilownia stopow aluminowych).
- 16f. Cleaning of aluminum castings (oczyszczalnia odlewow aluminowych).
- 17. Metallurgy Office (Biuro Metalurgii), Foundry Office (Biuro Odlewnii), Chemical Laboratory, and locker rooms. This building was joined to the foundry; it was brick and plaster; 50 x 10 x 8 m; 2 floors.
- 18. Main Mechanical Repair Shop (Warsztat Glownego Mechanika). The building was brick but had a frame of prefabricated concrete; red and gray; 1 floor. Section "a" was about 15 x 9 x 5 m; section "b" was about 12 x 9 x 7 m.
- 19a. Heating plant; construction began in 1954; the plant was believed to be completed and in use. The building was brick with a prefabricated concrete frame; red and gray; 20 x 15 x 12 m.
- 19b. Heating plant, constructed after WW II, and to be used until heating plant Nr 19a was completed; brick and prefabricated concrete; red and gray; 10 x 10 x 8 m.
- 20. Old chapel, which was not in use, and which was supposedly Catholic. The building was brick and plaster; gray; 12 x 8 m, with a chapel tower of about 50X1-HUM
- 21. Trolley turn-around point; single track:
- 22. Driveway for vehicles.
- Single-track railroad. This line connected with the ring line railroad between the Gdansk Station and the West Station (Dworzec Zachodni) in WARSAW.

CONFIDENTIAL 50X1-HUM -12-Annex C SKETCH OF THE TRANSPORTATION EQUIPMENT IN THE CZERNIAKOW DISTRICT OF 50X1-HUM WARSAW, POLAND (Not drawn to scale) Approximate North 50X1-HUM Ulica Kaszubska. J 7 1-C 2 a 8 3 Ħ ۲. 9 150 m ø 0 Ę CO κ 200 m CONFIDENTIAL

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Legend to Annex C

Note: Distances between buildings were unknown.

- 1. Pass Bureau and Waiting Room (Biuro Przepustek i Portiernja); brick and plaster, white, 15 x 6 x 4 m, 1 floor. The main entrance to plant was through this building; 1 guard checked workers' passes.
- 2. Production building and warehouse for products to be shipped out. The building was E-shaped; dotted lines represent vehicle passageways; brick and plaster; white; flat roof; 55 x 30 x 16 m; 4 floors.
- 3. Production building which housed the heaviest machinery; brick; $20 \times 15 \times 6 \text{ m}$; 1 floor; gable roof.
- 4. Warehouse for unfinished materials; gray concrete brick; 15 x 8 x 5 m; 1 floor.
- 5. Air raid shelter; protruded about 1 m above ground, and went about 3 m underground; thick concrete construction covered with earth, size similar to building Nr 4.
- 6. Driveway for vehicles; secured by 1 guard.
- 7. Driveway for vehicles; not in use.
- 8. Barrier, iron bar fence, about 2 m high.
- 9. Water fountain and grass gardens.

